UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,766	05/04/2007	Paul Benjamin Buckwalter	11336/1043 (P03085US)	6154

81165 7590 11/25/2009

HARMAN - BRINKS HOFER INDY
Brinks Hofer Gilson & Lione
CAPITAL CENTER, SUITE 1100
201 NORTH ILLINOIS STREET
Indianapolis, IN 46204-4220

EXAMINER	
RECEK, JASON D	

ART UNIT	PAPER NUMBER
2442	

MAIL DATE	DELIVERY MODE
11/25/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/578,766	BUCKWALTER, PAUL BENJAMIN	
	Examiner	Art Unit	
	JASON RECEK	2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 13-68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 13-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is in response to the amendments filed on August 4th 2009.

Information Disclosure Statement

The reference to application 10/704164 is noted. Examiner was aware of that application since the current application claims priority to it. However, in the future applicant is reminded of the proper way to submit a reference for consideration. See CFR 1.97, 1.98 and MPEP 609.

Response to Arguments

1. Applicant's arguments with respect to the 101 rejection have been fully considered and are persuasive. The 101 rejections of claims 20-28 has been withdrawn.

2. Applicant's arguments, see pg. 25-34, filed 8/4/09, with respect to the rejection(s) of claim(s) 1-4, 6-8, 11-14, 16-17, 19-25, 29, 34-36, 38-40, 42-44, 46, 48-49, 51, 53-55, 57-58 and 61-67 under 102(b) have been fully considered and are persuasive. Specifically, applicant's argument that Gross does not teach all of the newly added limitations is persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dinallo et al. US 5,487,167 and Antilla US 2001/0037382 A1.

3. Applicant's arguments, see pg. 34-40, with respect to the rejection(s) of claim(s) 5, 9, 10, 15, 18, 26-28, 30-33, 37, 41, 45, 47, 50, 52, 56 and 59-60 under 103(a) have been fully considered and are persuasive. Specifically, applicant's argument that Gross does not teach all of the newly added limitations is persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Dinallo et al. US 5,487,167 and Antilla US 2001/0037382 A1.

4. Applicant's argument concerning claim 5 has been fully considered but is not persuasive. Applicant seems to be arguing that Windows, Unix or Linux do not teach the limitations of claim 1, this is irrelevant since they are not relied upon for teaching the limitations of claim 1.

Claim Objections

5. Claims 5 and 30 are objected to because of the following informalities: the term "windows" should be capitalized since it is a trademark. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-8, 11, 13-25, 28-36, 38-40, 42-49, 51 and 53-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross et al. US 5,761,430, Dinallo et al. US 5,487,167 and Antilla US 2001/0037382 A1.

Regarding claim 1, Gross discloses "an operating system adapted to execute a plurality of applications" (Fig. 2b, Col. 5 ln. 37-40), "an isochronous audio application" (col. 6, ln. 25-28), "a network interface" (fig. 2b, col. 5 ln. 40-45), send and receive, "stream of packets includes data packets and isochronous audio packets" (col. 5 ln. 46 - col. 6 ln. 2, col. 6 ln. 25-27), "transmission of the isochronous audio packets being in response to receipt of a respective synchronization packet" synchronization (col. 2 ln. 44-52), "the data packets including information other than the isochronous audio data and other than information related to communication of the isochronous audio data" data packets contain control signals (col. 6 ln. 30-36), "an isochronous audio driver" (Fig. 2b, col. 5 ln. 37-40), "decodes isochronous audio packets" and "pass the data packets without change to the other applications" (col. 6 ln. 22-38).

Gross does not explicitly teach "an isochronous audio driver executable within the operating system" however this is taught by Dinallo as a multimedia transport mechanism including a multitasking operating system (col. 4l n. 8-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gross with the teachings of Dinallo to incorporate an "operating system". Dinallo suggests that operating systems should support multimedia data (col. 1 ln. 47-51).

The combination of Gross and Dinallo does not explicitly disclose "a protocol stack" however this is taught by Antilla as using a protocol stack to transfer data (paragraph 19). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Gross and Dinallo to include a protocol stack as taught by Antilla. Protocol stacks are well known in the art and yield predictable results. Thus this is merely the combination of a known element according to its established function in order to yield a predictable result.

Regarding claim 2, Gross discloses in response to "only one interrupt" (Fig. 2b - Interrupt Handler) executing applications (col. 5 ln. 45-65). Although Gross may receive multiple interrupts it certainly does not teach that it is only responsive when multiple interrupts are received. In fact, Gross clearly states "interrupt handler is invoked any time there is **an** event …" suggesting the system is responsive to only one interrupt request as recited by the claim.

Regarding claim 3, Gross discloses applications executed sequentially (col. 6 ln. 17-25) as initiating the necessary applications upon receipt of a packet.

Regarding claim 4, Gross discloses "synchronization packets" (Fig. 3, col.3 ln. 59-61).

Regarding claim 5, Gross does not explicitly disclose the operating system is "Windows, Unix or Linux" however these are well known in the art and yield predictable results. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Gross Dinallo and Anttila to use one of these operating systems. It is merely the combination of a known element according to its established function in order to yield a predictable result. See Dinallo (col. 1 ln. 62-64).

Regarding claim 6, Gross discloses "remove a header" that includes information, source address, etc. as packets that contain addresses and other data (col. 5 ln. 60 - col. 6 ln. 7).

Regarding claim 7, it corresponds to claim 4 and thus is rejected for similar reasons.

Regarding claim 8, Gross discloses "Ethernet packets" (Fig. 2b, col. 2 ln. 5-8).

Claims 11, 13-14, 16-17 and 19 correspond to the dependent claims 1-4 and 6-8, thus they are rejected for similar reasons.

Claims 15, 28 and 30 correspond to claim 5, thus they are rejected for similar reasons.

Regarding claims 18, 45, 56 and 59, Gross does not explicitly disclose TCP/IP however this is well known in the art and it yields predictable results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Gross, Dinallo and Anttila to comply with this specification for the purpose of sending data. It is merely the combination of a well-known element according to its established function in order to yield a predictable result.

Regarding claim 20, some of the subject matter corresponds to claim 1 and is rejected for similar reasons. Gross also discloses "a memory and a processor" (col. 4 ln. 20-24), transmitting packets and "generate an isochronous audio packet" (col. 3 ln. 59—col. 4 ln. 3).

Regarding claim 21, Gross discloses requesting audio data when the buffer is not full (col. 6 ln. 8-55).

Regarding claim 22, it corresponds to claim 4 and thus is rejected for similar reasons.

Regarding claim 23, Gross discloses "a compact disc" (col. 4 ln. 48-55).

Regarding claim 24, Gross discloses formatting packets (col. 6 ln. 40-50).

Regarding claim 25, Gross discloses storing and transmitting data (col. 6 ln. 30-50).

Claims 29 and 51 correspond to the system of claim 20 and thus are rejected for similar reasons.

Claims 31-33 all recite features of the operating systems claimed in claim 5, thus they are rejected for similar reasons.

Claims 34-36 and 39-40 correspond to claims 1-3 and 7-8, thus they are rejected for similar reasons.

Claim 38 corresponds to claim 23, thus is it rejected for similar reasons.

Claims 42-44, 46 and 48-49 correspond to claims 1-4, 7-8 and 11-14, thus they are rejected for similar reasons.

Regarding claim 47, Gross does not explicitly disclose “IEEE 802.3 standard” however this is well known in the art and it yields predictable results. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gross to comply with this specification for the purpose of sending data. It is

merely the combination of a known element according to its established function in order to yield a predictable result.

Claims 53-55 and 57 corresponds to claims 2 and 6-8, thus they are rejected for similar reasons.

Claims 58 and 61 correspond to claim 1, thus they are rejected for similar reasons.

Claims 62-67 correspond to claims 2-4, 6-7 and 12, thus they are rejected for similar reasons.

Regarding claim 68, Gross suggests "the data packets are formatted in accordance with a first protocol and the isochronous audio packets are formatted in accordance with a second protocol" by teaching that isochronous data is audio/video and asynchronous data is control signals (col. 4 ln. 17-39). This is also taught by Anttila as multiple audio and transmission protocols (paragraphs 4-5).

8. Claims 9 and 37, 50 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gross, Dinallo and Anttila as applied to claim 1 above, and further in view of Shay et al. US 2007/0153774 A1.

Regarding claim 9, Gross discloses “isochronous audio packets include isochronous audio data” (col. 6 ln. 25-26) and “the isochronous audio packets are decoded to extract the isochronous audio data and convert the isochronous audio data to audio data (col. 14 ln. 25-30). The combination of Gross, Dinallo and Anttila does not explicitly disclose “a CobraNet specification” however this is well known in the art and is taught by Shay (paragraph 16) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination to use this specification for the purpose of sending audio streams. This is merely the combination of a known element according to its established function in order to yield a predictable result.

Claims 37, 50, 52 and 60 correspond to claim 9, thus they are rejected for similar reasons.

9. Claims 10, 27 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gross, Dinallo and Anttila as applied to claim 1 above, and in further view of Smyers US 2001/0001564 A1.

Regarding claim 10, Gross does not explicitly disclose "only uncompressed audio data" however this is taught by Smyers as a method for separating audio data from a stream of data as in the present invention (paragraph 27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Gross to include the uncompressed feature of Smyers for the purpose of passing audio data. Smyers suggests that certain components only understand uncompressed data and thus it is necessary to only pass uncompressed data (paragraph 27).

Claims 27 and 41 correspond to claim 10 and thus are rejected for similar reasons.

10. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Gross, Dinallo and Anttila in further view of Ruberg US 6,675,054 B1.

Regarding claim 26, Gross does not explicitly disclose “the resolution”, “frequency” or “number of channels” however this is taught by Ruberg as a method of supporting audio by using the resolution, frequency and channels (abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Gross, Dinallo and Anttila to include the teachings of Ruberg for the purpose of audio protocol identification. Ruberg teaches that when the audio format is known the proper processing can be applied (abstract).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chiu et al. US 2002/0071424 A1 discloses using IEEE 802.3 (paragraph 42).

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON RECEK whose telephone number is (571)270-1975. The examiner can normally be reached on Mon - Fri 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Recek/
Examiner, Art Unit 2442
(571) 270-1975
/saleh najjar/
Supervisory Patent Examiner, Art Unit 2455